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EXAMINER	
CASCHERA, ANTONIO A	

ART UNIT	PAPER NUMBER
2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/842,561	CHERI ET AL.	
	Examiner	Art Unit	
	Antonio A. Caschera	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,20,22-24,27-31,33,34,39-41,44 and 45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18,20,22-24,27-31,33,34,39-41,44 and 45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 18, 20, 22-24, 27-31, 33, 34, 40, 41, 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al. (International Publication Number WO 00/41378) in view of Helms (U.S. Patent 5,952,992).

In reference to claim 18, Atkinson et al. discloses a method and system for control of a user interface (e.g. a display and keyboard) illumination of a hand held radiotelephone (see page 1, lines 5-7, 23-27 and Figures 1-2). Atkinson et al. discloses the radiotelephone to comprise of a housing to be held in a hand during use (see Figure 1, wherein a telephone, conventionally placed in hand to a user's ear when in use). Atkinson et al. discloses the radiotelephone to comprise of a display supported by a front surface (see #12, 14 of Figure 1). Atkinson et al. discloses a keymat in fixed positions relative to the display (see #13, 14 and cut outs of buttons on front surface #12 of Figure 1). Atkinson et al. discloses the backlight control of the invention to be applied to a radiotelephone (see Figure 1) which the Examiner interprets as inherently comprising cellular telephone electronics. Although Atkinson et al. does not explicitly disclose computing electronics to operate a personal information management application, Atkinson et al. does include a user interface to selected different backlight control profiles (see Figure 11). It is

well known in the art of telephony electronics for hand held devices comprising cellular telephone electronics to further offer at least a contacts user interface (which can easily be interpreted as a PIM application) for storing/viewing/editing user telephony data (Official Notice). Atkinson et al. further discloses the invention to comprise of a light detector (#21 of Figure 2) for detecting the level of light surrounding the device and converting it to electrical signals for a control means (#23 of Figure 2) to receive (see page 6, lines 18-20, 28-30). Atkinson et al. explicitly discloses adjusting the brightness behind the keymat based on detected light from the light detector (see page 1, lines 23-27, pages 3-4, lines 25-3 and Figures 2-3). Atkinson et al. further explicitly discloses adjusting a second characteristic of the device, the brightness of the display device based the level of the detected light (see page 1, lines 23-27, pages 3-4, lines 25-3 and Figures 2-3). Although Atkinson et al. discloses a single light detector, Atkinson et al. et al. does not explicitly disclose utilizing a plurality of light detectors. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Note, the Examiner interprets the weighted average of Helms functionally equivalent to Applicant's conditioned signal as the weighted average is based upon the average values of detected light measurements via the photodetectors. Again, this is seen as equivalent to Applicant's description of the "conditioned signal" (see paragraph 23). Lastly, Helms further discloses an embodiment of the invention wherein the greater AL

signal of the two photodetectors is utilized in indexing the lookup table (see columns 4-5, lines 52-2), which the Examiner interprets as ignoring a signal from one of the photodetectors when indexing the lookup table or generating the "conditioned signal." It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the user interface illumination techniques of Atkinson et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claims 20 and 30, Atkinson et al. and Helms disclose all of the claim limitations as applied to claims 18 and 29 respectively in addition, Atkinson et al. further explicitly discloses adjusting a second characteristic of the device, the brightness of the display device based the level of the detected light (see page 1, lines 23-27, pages 3-4, lines 25-3 and Figures 2-3). Also, Helms discloses utilizing signals from one or both of the photodetectors located on the front and back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2).

In reference to claims 22 and 23, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although Atkinson et al. does not explicitly disclose computing electronics to operate a personal information management application, Atkinson et al.

does include a user interface to selected different backlight control profiles (see Figure 11). It is well known in the art of telephony electronics for hand held devices comprising cellular telephone electronics to further offer at least a contacts user interface (which can easily be interpreted as a PIM application) for storing/viewing/editing user telephony data (Official Notice). Further Helms discloses a performing the brightness processing techniques upon a laptop which is seen to inherently comprise of contact, calendar, word processing, spreadsheet and calculation applications. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement more widely used computer applications (such as calendar, contact information, word processing, spreadsheet and calculation applications) into a telephone in order to provide such valuable information to a user at all times, on-the-go for remote availability to edit/view/create new data entries.

In reference to claim 24, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 18. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the user interface illumination techniques of Atkinson et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics

with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claim 27, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although Helms does disclose performing the brightness processing techniques upon a laptop, neither Atkinson et al. nor Helms explicitly disclose the handheld computer configured to comprise of a touch screen display however, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to the implement a multitude of different types of displays (i.e. LCD of various pixel sizes, TFT, character matrix LCD etc.) in the radiotelephone device of Atkinson et al.. Applicant has not disclosed that specifically providing such explicit type of display, touch screen display, provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the display and fixed keymat buttons included in the radiotelephone device of Atkinson et al. or LCD of Helms, because the exact type of display included in a phone/laptop device is seen as a matter decided upon by the inventor and to which best suits the application at hand. Furthermore, the Examiner sees such a limitation as providing no immediate criticality to the invention at hand since the real scope of the invention is seemed to be directed to use of light sensors on a handheld device to adjust brightness/other parameters of the device and because the implementation of a touch screen display in a phone/laptop device would not affect the

operation, as per the scope of the claims, of the device as a whole in view of the sensing of light via such light sensors. Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Atkinson et al. and Helms to obtain the invention as specified in claim 27.

In reference to claim 28, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the user interface illumination techniques of Atkinson et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claim 29, Atkinson et al. discloses a method and system for control of a user interface (e.g. a display and keyboard) illumination of a hand held radiotelephone (see page 1, lines 5-7, 23-27 and Figures 1-2). Atkinson et al. discloses the radiotelephone to comprise of a housing to be held in a hand during use (see Figure 1, wherein a telephone, conventionally

placed in hand to a user's ear when in use). Atkinson et al. discloses the radiotelephone to comprise of a display supported by a front surface (see #12, 14 of Figure 1). Atkinson et al. discloses a keymat in fixed positions relative to the display (see #13, 14 and cut outs of buttons on front surface #12 of Figure 1). Atkinson et al. discloses the backlight control of the invention to be applied to a radiotelephone (see Figure 1) which the Examiner interprets as inherently comprising cellular telephone electronics. Although Atkinson et al. does not explicitly disclose computing electronics to operate a personal information management application, Atkinson et al. does include a user interface to selected different backlight control profiles (see Figure 11). It is well known in the art of telephony electronics for hand held devices comprising cellular telephone electronics to further offer at least a contacts user interface (which can easily be interpreted as a PIM application) for storing/viewing/editing user telephony data (Official Notice). Atkinson et al. further discloses the invention to comprise of a light detector (#21 of Figure 2) for detecting the level of light surrounding the device and converting it to electrical signals for a control means (#23 of Figure 2) to receive (see page 6, lines 18-20, 28-30). Atkinson et al. explicitly discloses adjusting the brightness behind the keymat based on detected light from the light detector (see page 1, lines 23-27, pages 3-4, lines 25-3 and Figures 2-3). Although Atkinson et al. discloses a single light detector, Atkinson et al. et al. does not explicitly disclose utilizing a second of light detectors. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see

Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Lastly, Helms further discloses an embodiment of the invention wherein the greater AL signal of the two photodetectors is utilized in indexing the lookup table (see columns 4-5, lines 52-2), which the Examiner interprets as ignoring a signal from one of the photodetectors when indexing the lookup table or generating the "conditioned signal." It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the user interface illumination techniques of Atkinson et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claim 31, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 30 above. Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the user interface illumination techniques of Atkinson et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by

supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claims 33 and 34, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 29 above. Helms discloses a method and apparatus for automatically adjusting the brightness of an LCD based upon ambient lighting conditions of the environment in which a laptop (handheld) computer is used (see column 2, lines 3-6, 8-18 and Figure 1). Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic brightness controlling techniques of Helms with the user interface illumination techniques of Atkinson et al. in order to provide the computing electronics with a better representation of ambient light levels directed towards the device by supplying the electronics with multiple samples derived from the multiple sensors, thus the multiple samples providing more light detection at or around the device than using only one reading from one sensor. Such is particularly useful in situations in which light is directed towards the back of the LCD, hence toward the user's eyes, which light, while affecting the visibility of the LCD, might not be detected by the first photodetector (see column 2, lines 32-36 of Helms).

In reference to claims 40 and 41, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although both Atkinson et al. and Helms disclose light sensors provided on a front surface of a device housing, neither explicitly disclose the plurality of light sensors provided on the same surface of the housing. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to mount multiple light sensors on the same surface of a device, utilizing the photodetector measurement/averaging techniques of Helms to obtain a more accurate reading of light affecting the viewability of the device because as is well known in the art of computer processing, many data samples provides more detail than a single sample (Official Notice). Therefore, providing many photodetector measurements as opposed to one measurement, would provide a more accurate reading of surrounding light thereby leading to a more enjoyable display of data from the device.

In reference to claims 44 and 45, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 29 above. Helms discloses computing a weighted average of measured signals obtained by photodetectors (one on the front surface and another on the back surface of the display lid, see Figure 4) and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Note, the Examiner interprets the weighted average of Helms functionally equivalent to Applicant's conditioned signal as the weighted average is based upon the average values of detected light measurements via the photodetectors. Again, this is seen as functionally equivalent to Applicant's description of the "condoned signal" (see paragraph 23).

2. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al. (International Publication Number WO 00/41378), Helms (U.S. Patent 5,952,992) and further in view of Alderman et al. (U.S. Patent 5,828,056).

In reference to claim 39, Atkinson et al. and Helms disclose all of the claim limitations as applied to claim 18 above. Although Helms discloses ignoring signals from one of the photodetectors located on the front or back surface of the display lid, to adjust the brightness level of the LCD (see columns 4-5, lines 52-2), neither Atkinson et al. nor Helms explicitly disclose the ignored signal being identified as aberrant. Alderman et al. discloses a photodetector system that is able to discriminate between different types of light (see column 1, lines 7-13). Alderman et al. explicitly discloses the photodetector utilized in capturing reflected light whereby multiple beams of light are captured with the invention capable of ignoring spurious high signals that are abnormalities in the system (see column 3, lines 16-51). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the abnormal light beam detection theory of Alderman et al. with the automatic brightness controlling techniques of Helms and the user interface illumination techniques of Atkinson et al. in order set in place, an "error-checking" test of ambient light signals wherein abnormal or out-of-normal-range signals are not factored in when setting display characteristics which would ultimately lead to a more precise and viewer friendly display system.

Response to Arguments

3. The Examiner notes the cancellation of claims 19, 21 and 26.

4. Applicant's arguments, see pages 7-9 of Applicant's Remarks, filed 01/20/09 and the arguments presented in the interview of 12/30/08, with respect to the rejection(s) of claim(s) 18, 20, 22-24, 27-31, 33, 34, 39-41, 44 and 45 under 35 USC 103(a) in view of Kraft et al. have been

fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Atkinson et al..

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Friday between 7:00 AM and 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

/Antonio A Caschera/

Primary Examiner, Art Unit 2628

4/28/09